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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/022,526

12/20/2001

Fredrik Henn

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EXAMINER

AZAD, ABUL K

ART UNIT

PAPER NUMBER

2626

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

03/22/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/022,526

Applicant(s)

HENN ET AL.

Examiner

ABUL K. AZAD

Art Unit

2626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 December 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 6-19 is/are allowed.
- 6) ☒ Claim(s) 20-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 December 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This action is in response to the communication filed on December 18, 2006.
2. Claims 6-23 are pending in this action.
3. The applicant's arguments with respect to claims 6-23 have been fully considered but they are not deemed to be persuasive. For examiner's response to the applicant arguments or comments, see the detailed discussion in the Response to the Arguments section.
4. The amendment filed on December 18, 2006 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: Figure 8 and Specification Page 3, line 22 the added text.

Applicant is required to cancel the new matter in the reply to this Office Action.

Drawings

5. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the method/apparatus of encoding an audio signal must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended

replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claims 20-23 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. As per independent claims 20 and 22 the

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applicant fails to describe a method/apparatus for encoding an audio signal as recited in the claims such a way as to reasonably convey to one skilled in the art at the time of the invention was filed had possession of claimed invention.

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 20-23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. As per claims 20-23, it is unclear how method/apparatus of encoding of an audio signal is performed.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claims 20-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Minde et al. (US 5,991,717).

As per claim 20, Minde teaches, "method of encoding an audio signal to obtain an encoded base band audio signal", the method comprising the following steps:

“detecting, whether a to be processed passage of the audio signal has a pulse-train-like character or a non-pulse-train-like character, wherein a passage has a pulse-train-like character, when the passage includes a series of pulses having associated therewith a pulse period, and wherein a passage has a non-pulse-train-like character, when the passage does not include a series of pulses having associated therewith the pulse period” (col. 3, lines 6-54); and

“associating a control signal to the encoded base band audio signal, the control signal indicating, whether a passage of the encoded base band audio signal has a pulse-train-like character or not” (col. 3, lines 6-12); and

“forming a bit stream having the encoded base band signal and the control signal” (col. 4, lines 9-30).

As per claim 22, it is interpreted and thus rejected for the same reasons set forth in the rejection of claim 20.

As per claims 21 and 23, Minde teaches, “the step of detecting detects whether a passage has a pulse-train-like character or a non-pulse-train-like character by performing a transient detection in a time domain or a peak-picking operation in the frequency domain” (col. 1, lines 49-64).

Allowable Subject Matter

12. Claims 6-19 are allowed the prior art of record.

Response to Arguments

13. The applicant argues, "since page 2, line 20 states that a discrimination between pulse-like and non-pulse-like signals can be performed in the encoder and then a corresponding control signal is sent to the decoder, and since the second paragraph of page 6 and Fig. 7 clearly describes how the serial bitstream, (which of course has to come from an encoder) is processed, what is recited in the encoder-related claims is clearly described in the application. Again, please see page 5, line 30, where, the encoder-related embodiment is described".

The examiner disagrees with the applicant's above assertion that specification page 2, line 20, page 6 and Fig. 7 clearly describe an encoder as claimed in claims 20-23. The indicated portion merely shows a control signals are transmitted from an encoder or control signals are obtained by the decoder. However, there is no such description of an encoder in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed.

To satisfy the written description requirement, a patent specification must describe the claimed invention in sufficient detail that one skilled in the art can reasonably conclude that the inventor had possession of the claimed invention. See, *e.g., Moba, B.V. v. Diamond Automation, Inc.*, 325 F.3d 1306, 1319, 66 USPQ2d 1429, 1438 (Fed. Cir. 2003); *Vas-Cath, Inc. v. Mahurkar*, 935 F.2d at 1563, 19 USPQ2d at 1116.

However, a showing of possession alone does not cure the lack of a written description. *Enzo Biochem, Inc. v. Gen-Probe, Inc.*, 323 F.3d 956, 969-70, 63 USPQ2d 1609, 1617 (Fed. Cir. 2002).

14. Applicant's arguments regarding 112, 2nd paragraph is not persuasive to the examiner because there are no basis of the claimed subject matter in the specification have clear idea of what has claimed.

15. The applicant further argues, "Applicant would like to emphasize that the excitation signal $ex(n)$ in the Minde reference, which may have noise-like components or pulse-like components is not the audio signal but is an excitation signal for the LPC synthesis filter, which is, of course, not an audio signal. Please refer to column 3, line 42, where it is explicitly stated that the excitation contains pulse-like or noise-like components. This excitation is different from the audio signal, since one cannot hear anything when the excitation signal is rendered without the filter, but one can hear the "audio signal" as recited in claim 1. While the second paragraph of claim 22 explicitly states that the audio is pulse-like or non-pulse-like, Minde only teaches that an excitation signal for a filter is pulse-like or noise-like. Since an "excitation signal as derived from a codebook" is not audible, one cannot say that the excitation signal is an audio signal."

In response to above argument the examiner notes that again as to claims 20-23 are unclear, because the claims and/or the specification does not particularly point out

in the encoder whether the analog audio signal before the excitation is characterized as a pulse-train-like or a non-pulse-train-like and how the excitation is characterized as a pulse-train-like or a non-pulse-train-like. However, at the Summary section page 1, line 23 applicant express that "excitation signal" can be modeled as a "pulse-train".

Specification page 2, lines 19-20 only state "according to the present invention, discrimination between pulse-like and non-pulse like signals can be performed in the encoder, and corresponding control signal sent to the decoder". There is no description in the specification as to how the audio signal is characterized as a pulse-train-like or a non-pulse-train-like signal.

16. The applicant further argued that Minde does not teach a encoded base band signal and a control signal.

The examiner notes that Base band signal according to "Newton's Telecom Dictionary" is "a form of modulation in which signals are pulsed directly on the transmission medium without frequency division". Therefore, a base band signal can be reads on col. 4, lines 9-18. The applicant does not defined what is his control signal, the control signal also teaches at col. 4, lines 9-18.

Conclusion

17. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Abul K. Azad** whose telephone number is **(571) 272-7599**. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Richemond Dorvil**, can be reached at **(571) 272-7602**.

Any response to this action should be mailed to:

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

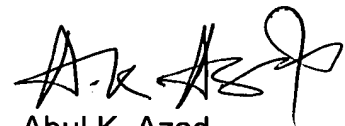
Or faxed to: **(571) 273-8300**.

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Hand-delivered responses should be brought to **401 Dulany Street, Alexandria, VA-22314** (Customer Service Window).

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

March 14, 2007



Abul K. Azad
Primary Examiner
Art Unit 2626